Virtual Environment, Digital Hypertext, Reading and Writing in Foreign Language

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Abstract— This work intends to analyze – in an activity carried out with students from the third period of the Language (Spanish) undergraduate course of a college located in Itaperuna, a town in the State of Rio de Janeiro, Brazil - how the digital hypertextual reading can facilitate the selection of information in order to facilitate the writing process of texts in Spanish that can be broadcasted in the virtual environment, verifying how this may happen, so that these productions are shared, also allowing the interaction of the subjects with the language and with their peers. For this objective, we used the qualitative methodology (Erickson, 1986) with action research, seeking foundation in what theorists such as Lévy (1996, 1999), Coscarelli (2006, 2009), Gomes et al. (2015), Bannell et al. (2016), among others, investigate. As results, we emphasize that the subjects of the research actively participated in the construction of their own learning regarding the aspects covered in the foreign language class, and with this they were able to practice reading, writing, and the usage of the vocabulary and grammar studied. Finally, we conclude that the hypertext worked here as an inclusive device, facilitator of reading and propitiator of writing, making the participant students authors of digital texts that provided them with learning throughout all the process they have been through.

Keywords— Hypertextuality. Spanish Language, Virtual Environment.

I. INTRODUCTION

According to Coscarelli (2009), there is no way to talk about technology and education without mentioning language, because the forms of reading and writing are different and the dispositions of texts are as well. Thus, as the researcher complements, dealing with a computer requires dealing with languages, both the verbal, "[…] like the other semiotic systems, and the icons and all programs non-verbal language (tools bars), programming languages, such as HTML, animations, video, radio, etc" (Dias & Corrêa, 2014, p. 3-4)[1].

In the context of foreign language teaching, it is not different, once they have "an important role in the entire development of the student and their teaching and learning Provide him with new experiences, skills development, understanding of cultures and new world understanding" (Fettermann, Silva & Paula, 2016)[2]. This, in the current days, has been largely made possible through the use of Digital Technologies of Information and Communication (DTIC), which have opened doors to

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[1] "[...] *como os outros sistemas semióticos, como os ícones e toda linguagem não verbal dos programas (barras de ferramentas), as linguagens de programação, como HTML, animações, vídeo, rádio, etc*" (translated by the authors).

[2] "[...] *um importante papel no desenvolvimento integral do aluno e seu ensino e aprendizagem proporcionam a ele novas experiências, o desenvolvimento de habilidades, compreensão de culturas e novo entendimento de mundo*" (translated by the authors).

new forms of communicating in the contemporary world. Connected to that, the language teacher seeks strategies which allows a more significant and dynamic learning to the student, provided by the digital technologies. One we approached here is the new way of reading and searching, called digital hypertextual reading. According to researchers, it can help the reader to select the information needed, quickly. This reading approach can facilitate the writing process and allow the learning to be more interactive e connected to the current demands.

Thus, it is possible to assert that the digital technologies have been more and more used in the context language teaching, due to the advantages the internet can cause to the teaching and the learning process. One of the tools which, according to current researches, have demonstrated important results is the social network *Facebook*, and its use applied the language teaching can cover and make varied forms of reading and writing possible, besides entering the student in wider social and cultural contexts.

Considering that the virtual environment can be used as a resource to teach and learn, we intended to observe the potential of the digital hypertextual reading and, as a consequence, the text production in the classroom, as well as its post on *Facebook*, resulting in an interaction of students with their peers and the language, during the learning process.

We opted, in this perspective, for the application of the activity in a group of the third period of Languages (Spanish) of a college in Itaperuna/RJ, a town in the State of Rio de Janeiro, Brazil, supporting the study in theorists such as Lévy (1996, 1999), Coscarelli (2006, 2009), Gomes et al. (2015), Bannell et al. (2016), among others.

1 Hypertext, new readers and writers

In the last years, the modern Foreign language teaching has counted on the extra support made possible by the experience with the diverse technological tools. Thus, the hypertext became an element that contributes with the technologies, once the internet converted itself in a source of information Which help its users to surf in a not linear way, seeking new knowledge about the language studied, both grammatical and social cultural, confirming what Süssekind (2004, p. 107) defends, when she says that the hypertext is "[…] a cultural and social practice, allied to the technical instrument"[3], which we call here digital environments.

The hypertext in this paper is not the one found in a printed text, that is full of extra information like images, bottom page notes, among others that can lead the reader to a not linear reading. However, it is hosted in digital environments. Coscarelli (2009, p. 554)[4], clarifies that "[...] hypertexts are not linear texts that offer *links* or connection links to other texts, which can be images, graffics, videos, animations, sounds".

The internet as a digital support contributes to new types of reading and writing produced collectively (Lévy, 1996), taking the students to an interactive environment. As Dias and Corrêa (2014, p. 4) highlight, "Reading and writing ways are different today and the ways in which texts are available are as well"[5]. That can make hypertext a collaborator in the teaching and learning process of reading and writing in a foreign language.

In this sense, Lévy (1996) points out that the digital hypertext allows students to perform their research in a fast and intuitive way, facilitating the understanding and production of new meanings and making the reading more meaningful and dynamic. Therefore, if reading consists of selecting, schematizing, constructing a network of internal references to the text, associating other data, integrating words and images into a personal memory in permanent reconstruction, "Then the hypertextual devices constitute, indeed, a kind of objectification, exteriorization, virtualization of the reading processes" (Lévy, 1996, p. 43)[6].

From a hypertextual reading, the student ends up widening the cognitive, favoring a practice of writing both in digital and on paper, because "the hypertext as a new conception of writing finds the theories of text at this extreme point which is the intersection of semiotic heterogeneities" (Süssekind, 2004, p. 107)[7].

Thus, reading in digital environments provides the students with information which will be useful in their knowledge acquisition and language learning, besides allowing the reader to become also "a co-author, once he can add information to the text" (Coscarelli, 2009, p. 551)[8], and this hypertextual reading, powered and

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[3]   "[…] *uma prática cultural e social, aliada ao utensílio técnico*" (translated by the authors).

[4]   "[...] *hipertextos são textos não lineares que oferecem links ou elos de ligação para outros textos, que podem inclusive ser imagens, gráficos, vídeos, animações, sons*" (translated by the authors).

[5]   "*As formas de ler e escrever são diferentes hoje e as formas de disponibilização dos textos também são*" (translated by the authors).

[6]   "[...] *então os dispositivos hipertextuais constituem de fato uma espécie de objetivação, de exteriorização, de virtualização dos processos de leitura*" (translated by the authors).

[7]   "[...] *o hipertexto enquanto nova concepção de escrita encontra as teorias do texto nesse ponto extremo que é o cruzamento de heterogeneidades semióticas*" (translated by the authors).

[8]   "[...] *um co-autor, uma vez que pode*

interactive, will insert the learner in a significative textual production context. This way,

> When the hypertext structure system of visualization in real time (or its dynamic cartography) is well known, or when the search can be made in a natural and intuitive way, the open hyper documents, accessible through a network of computers, are powerful instruments of collective writing-reading (Lévy, 1999, p. 57).

Therefore, it is possible to conceive the hypertext as an accelerator tool to the foreign language teaching-learning process, for allowing the learner, after his reading with big scale information, get a wide vocabulary that will help him in the writing production, because "with the hypertext, all reading is a potential writing" (Lévy, 1999, p. 61)[9].

II.   NEW READING AND WRITING PRACTICES

As already mentioned in this text, Lévy (1996) declares that the digital hypertext can facilitate the comprehension and production of new senses and make Reading more significative e dynamic, through rapid and intuitive searches. In this case, the reader/learner wides his cognitive skills, what can lead him to a writing practice, which can happen both in the digital environment and on paper.

This possibility was verified in an activity performed with students of the third period of Languages (during the subject of Spanish I), in a private college in Itaperuna-RJ.

For the class, the students were sent to the informatics laboratory at the institution, and they were asked to search about two contents of grammar, *Reglas de acentuación* (Word stress rules) and *Palabras heterotónicas* (Heterotonic words), which had already been worked in previous classes, for, after the search, explaining it in a short text and posting it in the class' Facebook group.

The activity happened in three steps, with the support of action research: 1. Hypertextual research; 2. Online Writing production; 3. Teacher mediation.

The first step consisted of the hypertextual search on the proposed contents, in Which the students searched on several web pages, having Google.com as a starting point, what took them to access various websites and links, choosing the most interesting ones for the task. It is worth mentioning, according to Coscarelli (2006, p. 8), that "Links do not carry meaning, but indicate a path for their

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adicionar informações ao texto" (translated by the authors).

[9]   "*[...] com o hipertexto, toda leitura é uma escrita potencial*" (translated by the authors).

construction"[10].

The second step was the written production by the students, happened after the readings. It was possible to note what Lévy (1996, p. 43) defends about hypertextual devices: they work as "[...] a kind of objectification, exteriorization, virtualization of reading processes"[11], because it allows the reader to select, schematize, integrate "[...] words and images to a personal memory in permanent reconstruction"[12] (Fettermann, Silva & Paula, 2016, p. 4). This can be observed in the figures below:
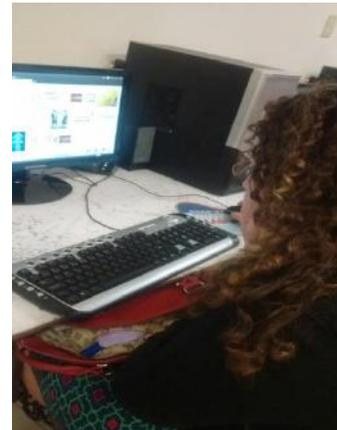
Photograph 1: Student during the hypertextual research
                                                      Source: Teacher's
collection
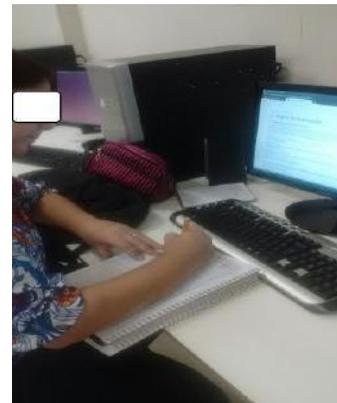
Photograph 2: Student during the textual production
                        Source: Teacher's collection

Thus, the content searched in the hypertext search was used to produce the explanatory material that was then posted on the social network by the students. In

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[10]   "*Links não carregam sentido, mas indicam um caminho para a construção deles*" (translated by the authors).

[11]   "*[...] uma espécie de objetivação, de exteriorização, de virtualização dos processos de leitura*" (translated by the authors).

[12]   "*[...] as palavras e as imagens a uma memória pessoal em reconstrução permanente*" (translated by the authors).

agreement with what Bannell et al. (2016, p. 118) stands out,

> [...] the educational objective pursued is to stimulate the participants' active learning, with an emphasis on the sharing of knowledge and dialogue as a form of interaction.

In this perspective, the students were able to participate actively in their own learning related to the aspects covered in the Spanish class. With this, we highlight the skills that were practiced during the proposed task: reading, writing, vocabulary use and the practice of the grammar addressed.

The end of the activity was the third step, the teacher mediation, starting from the assumption that:

> [...] the exploitation of digital technologies in the space of the pedagogical relationship between teacher and student implies perceiving them as a space for dialogue: a place where words acquire new meanings, thanks to the experimentation of new ways of thinking, [...] based on the mutual exchange between teacher and student, on the collaborative work to solve problems, on the application of cognitive capacities to known and unknown situations and challenges (BANNELL et al., 2016, p. 121).

The following figure demonstrates teacher mediation in virtual space. We emphasize, however, that it happened throughout the teaching and learning process of the themes worked, from classes outside the computer lab until after the postings, through the teacher's interactions with the students using the Spanish language to explain the new content, clarification of the doubts, suggestion of the work and tutoring of all the activity in the group of the class on Facebook.

Fig.1: Written production
Source: Group "Español UniFSJ", on *Facebook*

Fig.2: Written production and teacher interference
Source: Group "Español UniFSJ", on *Facebook*

Thus, we could observe that the hypertextual readings in the digital context favored the practice of authorial writing and allowed the students to increase the capacity to choose the information researched and then produce their texts according to the proposition of the activity,

since

> [...] in virtual environments users are no longer external observers and become active and interacting participants, and digital technologies provide opportunities for interaction, self-expression and authorship never before experienced (BANNELL et al., 2016, p. 115).

We emphasize that Facebook was chosen, once it has been the most used social network by the students, and it is also a space for information exchange, doubts explanations and interaction between them and the teacher, as well as an environment of study and incentive for the students to practice the teaching practice in the digital scope. "It is a space where all people can teach and learn from each other" (Bannell et al., 2016, p. 118)[13].
Therefore, we emphasize that the resources offered by the digital information and communication technologies, such as the hypertext that enables the search of information to perform tasks, and Facebook as a virtual environment for teaching and learning, favor the formation of new readers and authors, able to select and produce content that will enable them as future teachers.

III.   FINAL CONSIDERATIONS

Through the use of digital technologies, it has been possible to insert new practices in the context of language teaching. The demands of the modern world lead us to seek alternatives that are more consistent with the realities of the students, who are often connected to several digital social networks in their daily lives.
In this way, this work fulfilled its objective, which was to analyze - in an activity carried out with students of the third period of the undergraduation of Languages (Spanish) of a college located in the municipality of Itaperuna/RJ – if it was possible and how the hypertextual reading in the digital environments could facilitate the selection of information and, later, the process of writing and posting of texts in Spanish in the virtual environment, in order to share their productions to interact with the language and with their peers.
Thus, we observed that through the hypertexts it was possible to select key information for the researches carried out by the participants, who, from then on, organized their writings in an objective way, including in them only what was proposed by the accomplished task.
Then, we consider that hypertext worked here as an

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[13]   "*Trata-se de um espaço em que todas as pessoas podem ensinar e aprender mutuamente*" (translated by the authors).

inclusive device, facilitator of reading and propitiator of writing by students who became authors in this context. In this sense, we verified that this is one of the roles of this device, since the digital environment has been a place where they feel more fearless and interested in participating nowadays, taking advantage of the learning opportunities that arise.
Facebook, in this context, once again was verified as a virtual conducive place to the teaching and learning process, which favored reading and authorship of texts that can contribute to the training of future teachers, facilitators of knowledge exchange.
We believe, finally, that the practice reported on this paper can be applied in different contexts of language teaching and we emphasize that we do not intend to make generalizations on this subject, but we also try to propose that new experiences be carried out in this field so that relevant debates emerge from the practice shared here.

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